

REMARKS/ARGUMENTS:**Summary of Amendments to the Claims**

Applicants have amended claims 52, 55, 56, 62, 64-66, 69, 70, 76, 78-80, 83, 84, 90, 92, and 93 to more particularly define the invention. Support of the lower limit 32% of the flash vaporization component is found in Example 5 on page 15. In Example 5, the third sample contains 30.10% of ethanol and 1.70% of methanol, with a total of 31.80% of the flash vaporization component. No new matter has been added.

Claims Rejections – 35 U. S. C. § 103

The Examiner rejected claims 52, 55-56, 62, 64-66, 69-70, 76, 78-80, 83-84, 90, and 92-93 under 35 U.S.C. § 103(a) as being unpatentable over Petri (EP 0842 605 A1) in view of Monticello *et al.* (U.S. Patent No. 5,891,392).

Applicants respectfully submit that new claims 52, 55-56, 62, 64-66, 69-70, 76, 78-80, 83-84, 90, and 92-93 are patentable over the cited prior art.

With respect to claims 52, 66, and 80, the Petri reference discloses a method for spraying a disinfectant composition in aerosol form on inanimate surfaces that includes the following: about 11% by volume of hydrogen peroxide, about 12% by volume of Geraniol as antimicrobial active of essential oil, about 9% by volume of polyacrylic acid as shear thinning polymeric thickener, about 3% by volume of malonic acid as an optional ingredient chelating agent, about 4% by volume of catechol as an optional ingredient radical scavenger, 13% by volume of ethanol as an optional ingredient solvent, and about 47% by volume of water up to 100%.

The Monticello reference discloses an aqueous hard surface disinfectant composition that teaches the concentration range for ethanol 0.1-25% by volume (converting 0.1-20% by weight using the density value for ethanol at 20 degree Celsius to be 0.79 g/ml).

However, the claimed invention relates to a liquid flash-dry disinfectant composition for disinfecting an inanimate surface, comprising:

- (1) about 3% to about 30% by volume of hydrogen peroxide;
- (2) about 32% to about 85% by volume of a flash vaporization component; and,
- (3) a remainder component.

The Petri composition which comprises 13% by volume of ethanol in combination with the Monticello composition which comprises 26% by volume of ethanol do not anticipate or render obvious the composition of the present invention, which comprises at least 32% by volume of a flash vaporization component. The higher concentration of a flash vaporization component is not obvious from Petri in view of Monticello.

Additionally, the Petri reference discloses a shear thinning polymeric thickener or a mixture thereof as a third essential ingredient (page 4, numbered lines 10-11) in the claimed composition that performs a dual function of being not only to prevent or diminish inhalation by the user when it is sprayed onto the surface to be disinfected, but also to provide increased contact time of the composition on vertical surfaces (page 4, numbered lines 15-18). The Petri reference also discloses the incorporation of said shear thinning polymeric thickener into the sprayable liquid composition allows the formation of mist as it is sprayed onto a surface wherein the liquid droplets/particles formed are at least partially not smaller than 10 microns (page 5, numbered lines 14-17). The Petri reference further discloses KELZAN AR[®] as a preferred shear thinning polymeric thickener that can produce large particle size mist or aerosol when sprayed (page 4, numbered lines 39-40). Comparing with smaller liquid droplets, larger droplets have less surface area per unit volume and therefore experience less moisture evaporation. The Petri reference therefore discloses a composition with minimized evaporation. Although the Petri reference discloses that upon spraying the composition onto a hard surface, no residues are left, a delayed drying process is expected. In contrast, the claimed invention relates to a disinfectant composition that has a flash vaporization characteristic i.e. to achieve in a relatively, short period of time after applying the flash-dry aerosol to a surface, a state wherein the surface is essentially dry leaving behind the antimicrobial agent. Therefore, the present invention is not obvious from the Petri reference.

Lastly, the Petri reference teaches that the compositions are packaged in spray dispensing containers. However, the Petri reference does not teach a spray dispensing container comprising the compositions that are claimed by the present invention. The present invention is thus not obvious from the Petri reference.

Claims 55-56, 62, and 64-65 depend from claim 52. Claims 69-70, 76, and 78-79 depend on claim 66. Claims 83-84, 90, and 92-93 depend on claim 80. Claims 55-56, 62, 64-65, 69-70, 76, 78-79, 83-84, 90, and 92-93 are also not obvious in view of Petri and Monticello *et al.*, since “[d]ependent claims are nonobvious under section 103 if the independent claims from which they depend are nonobvious.” *In re Fine*, 5 USPQ2d, 1586-1600 (Fed. Cir. 1988).

For the reasons set forth above, the present invention is not obvious from Petri in view of Monticello *et al.*.

Conclusion

Based on the foregoing amendments and remarks, favorable consideration and allowance of all of the claims now present in the application are respectfully requested.

Should the Examiner require or consider it advisable that the specification, claims and/or drawings be further amended or corrected in formal respects in order to place the case in condition for final allowance, then it is respectfully requested that such amendment or correction be carried out by Examiner’s Amendment and the case passed to issue. Alternatively, should the Examiner feel that a personal discussion might be helpful in advancing this case to allowance, the Examiner is invited to telephone the undersigned.

The Commissioner is authorized to charge any required fees, including any extension and/or excess claim fees, any additional fees, or credit any overpayment to Goodwin Procter LLP Deposit Account No. 06-0923.

Respectfully submitted for Applicant,



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